

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of MD 355 (Rockville Pike) and MD 547 (Strathmore Avenue) / Georgetown Prep. Driveway in Montgomery County. MD 355 (Rockville Pike) is assumed to run a north-south direction.

This project involves the replacement of the existing signal heads with black faced signal heads. The side streets of MD 547 (Strathmore Avenue) / Georgetown Prep. Driveway shall now operate as a split phase. In addition, all loop detectors shall be replaced due to planned milling of the intersection.

II. INTERSECTION OPERATION

- The intersection is to operate in a NEMA six-phase, semi-actuated mode, with the MD 355 (Rockville Pike) approaches continuing to run concurrent. Exclusive/Permissive left turn phases shall continue to be provided for both approaches of MD 355 (Rockville Pike). A pedestrian phase with pushbutton actuation shall remain in effect across the north leg of MD 355 (Rockville Pike). The pedestrian phases across MD 547 (Strathmore Avenue) shall continue to be on recall. New far side sampling stations shall be provided on both legs of MD 355 (Rockville Pike) and across MD 547 (Strathmore Avenue) at this intersection. The MD 547 (Strathmore Avenue) / Georgetown Prep. Driveway approaches shall now operate as a split phase.
- The existing full-traffic-actuated, eight-phase controller housed in a NEMA size "6" base-mounted cabinet shall remain in use at this intersection. Four new 4-channel detector amplifiers with a detector rack power supply and panel shall be retrofitted into the existing cabinet.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, excluding interconnect, to the appropriate terminals and shall properly label each cable.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST (CONT)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODE	DESCRIPTION	QUANTITY
201032	Class 2 excavation	3 CY
585620	12" white heat applied permanent preformed thermoplastic pavement marking.	530 L.F.
585624	24" white heat applied permanent preformed thermoplastic pavement marking.	130 L.F.
648140	Monolithic concrete median 4", type A-1.	20 L.F.
800000	Install conduit band in existing base.	1 EA
800000	Pedestrian R10-4(1) sign. Note: Sign to read "PUSHBUTTON TO CROSS ROCKVILLE PIKE".	1 EA
800000	Furnish and install 2" schedule 80 rigid polyvinyl chloride conduit - trench.	30 L.F.
800000	Remove and dispose existing of equipment (includes signing and signal equipment removal).	8 EA
805115	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - bored.	70 L.F.
805135	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trench.	15 L.F.
805160	Furnish and install 1" liquid tight flexible non-metallic conduit for detector sleeves.	80 L.F.
811001	Furnish and install electrical handhole.	3 EA
811002	Remove existing handhole.	2 EA
813014	Install ground mounted sign.	67 S.F.
813015	Install overhead sign.	26 S.F.
813022	Remove ground mounted sign.	38 S.F.
846001	Furnish and install 4" x 4" wood post.	55 L.F.
860272	Furnish and install 12" vehicular traffic signal head section (Black Faced).	48 EA
860278	Furnish and install 12" pedestrian signal head section (Black Faced).	8 EA
861104	Furnish and install electrical cable - 2 conductor (aluminum shielded).	1330 L.F.
861106	Furnish and install electrical cable - 3 conductor (No. 14 AWG).	275 L.F.
861107	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	265 L.F.
861108	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	1200 L.F.
862101	Furnish and install loop wire encased in flexible tubing (No. 14 AWG).	3645 L.F.
862102	Furnish and install saw cut for signal (loop detector).	1025 L.F.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

CATEGORY CODE	DESCRIPTION	QUANTITY
900000	Detector rack retrofit.	1 EA
963010	Detector amplifier 4-channel rack mount (To be installed into the existing cabinet by S.H.A. Forces).	4 EA
900000	Detector panel (To be installed by SHA forces)	1 EA
900000	Detector rack power supply (To be installed by SHA forces)	1 EA
900000	Sheet aluminum signs to consist of:	15 SF
	R3-5L "LEFT TURN ONLY" sign, (30" x 36") span wire mounted.	1 EA
	R3-6 "LEFT TURN AND THRU" sign, (30" x 36") span wire mounted.	1 EA
900000	Sheet aluminum signs to consist of: (Blue or Green)	78 SF
	M6-2 "arrow (symbolic)" left diagonal sign, (15" x 21") ground mounted.	3 EA
	M6-2 "arrow (symbolic)" left diagonal sign, (15" x 21") pole mounted.	1 EA
	M6-2 "arrow (symbolic)" right diagonal sign, (15" x 21") ground mounted.	3 EA
	S1-1 "SCHOOL" sign, (36" x 36") ground mounted.	6 EA
	S1-1 "SCHOOL" sign, (36" x 36") pole mounted.	1 EA

The contact persons for District #3 are as follows:

Mr. Majid Shakhb
Assistant District Engineer - Traffic
Phone: (301) 513-7358

Mr. Randy Brown
Assistant District Engineer - Maintenance
Phone: (301) 513-7304

Mr. Augie Rebish
Assistant District Engineer - Utility
Phone: (301) 513-7350

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

The power company representative is:

SEQUENCE OF OPERATION SHEET

MD 355
RUNS IN AN
NORTH-SOUTH
DIRECTION

TRAFFIC OPERATIONS SECTION
DIVISION OF TRAFFIC ENGINEERING
MONTGOMERY COUNTY, MARYLAND

MD 355 and MD 547 / GEORGETOWN PREP
SCHOOL DRIVEWAY

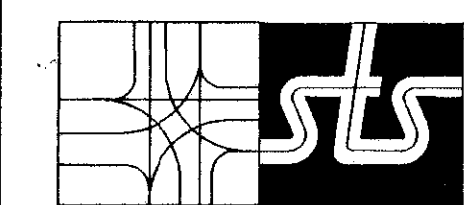
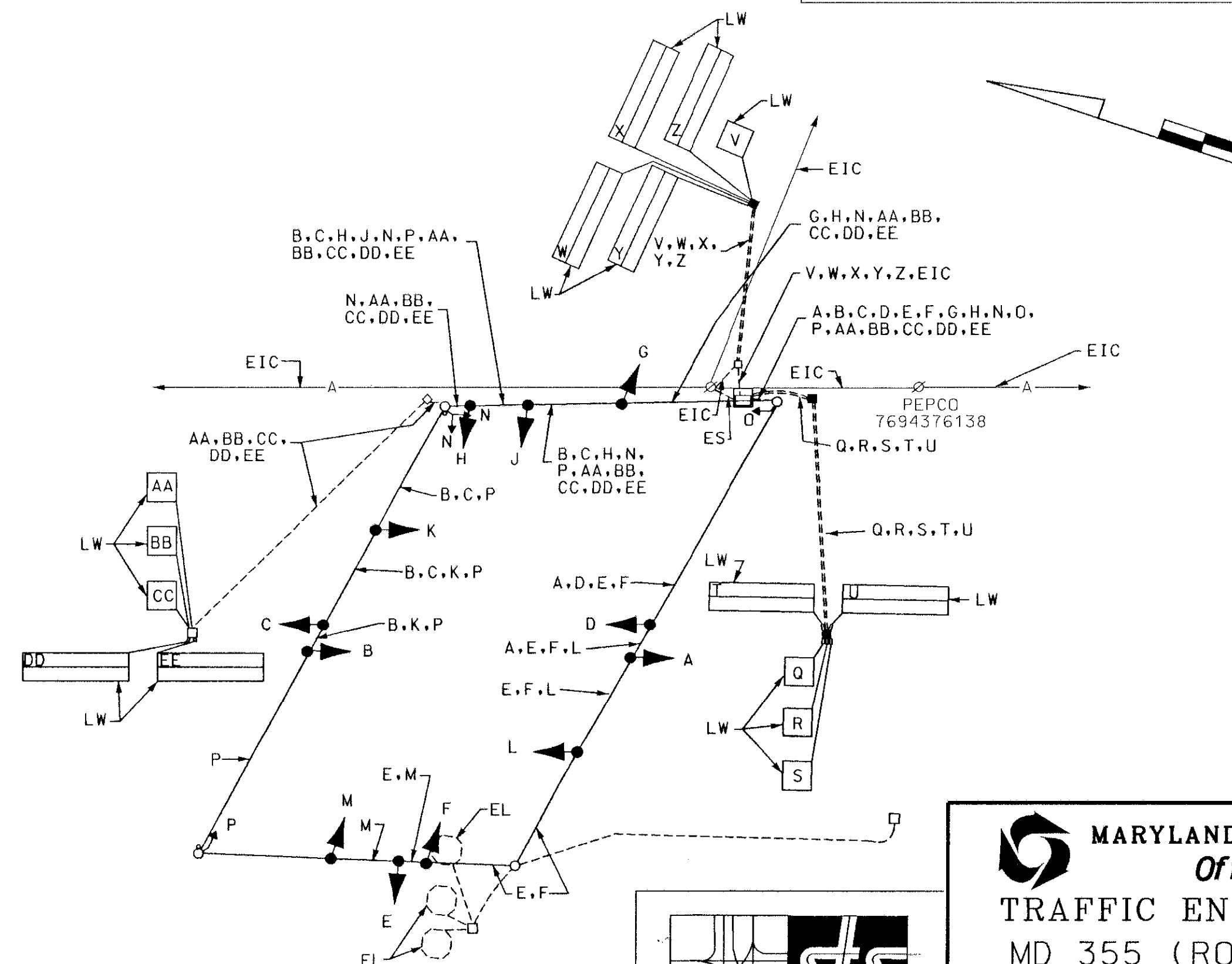
INTERSECTION:

SIGNAL HEAD INDICATIONS					
SIGNAL NO.	3,6,9,12	1,2,4,5	7,8,10,11	13,14,15,16	
TOTAL:	4	4	4	4	
LEGEND	(R)	(R)	(R)	(R)	(H)
OPTICALLY LIMITED	(Y)	(Y)	(Y)	(Y)	(X)
R RED	(G)	(G)	(G)	(G)	
Y YELLOW					
G GREEN					
ARROW					
FLASHING					

SEQUENCE OF OPERATION																				
SIGNAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
2	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
3	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
4	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
5	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
6	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
7	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
9	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
10	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
11	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
12	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
13	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
14	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
15	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
16	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W	W
PHASE	2 & 6	ALL RED	3	ALL RED	4	ALL RED	1 & 5	ALL RED	1 & 6	ALL RED	2 & 5	ALL RED								

NOTES:

WIRING DIAGRAM



412261.dgn TASK-37



Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 355 (ROCKVILLE PIKE) AND MD 547
(STRATHMORE AVE) / GEORGETOWN PREP

DRAWN BY: ROB CICCHINI
CHECKED BY: R. ZACHERL
SCALE: N/A
DATE: 3/20/02

F.A.P. NO.
S.H.A. NO.
COUNTY: MONTGOMERY
LOG MILE: 15035505.27

TS NO.
SHEET NO.
T.J.M.S. NO.
2 OF 2

NO. PHASING

